

Express Mail No. EL 752187866 US

15-RI-00501 PATENT

IN THE UNITED STATES OFFICE OF PATENTS AND TRADEMARKS

Applicant: Ting Y. Lee

Serial Number: 10/007,341 : Group Art Unit: 2121

Filed: October 25, 2001

: Examiner:

For: METHOD AND APPARATUS

FOR CALCULATING BLOOD

FLOW PARAMETERS

PRELIMINARY AMENDMENT

Commissioner for Patents Washington, D.C. 20231

Prior to the examination of this Application, please amend the Application as follows:

IN THE SPECIFICATION

At Page 7, please delete paragraph 20 and replace with the following paragraph:

In one embodiment, the arterial curve of contrast concentration measured by system 10 and NMR system (not shown) is corrected for partial volume averaging as described herein. For example, during a cranial scan, but not limited to cranial scans, arterial regions within the vascular territories of the cerebral arteries (anterior and middle) are identified, and used to generate the measured arterial curve of contrast concentration, $C_a(t)$. The measured arterial curve of contrast concentration is related to the arterial curve of contrast concentration, $C_a(t)$ by $C_a(t) = kC_a(t)$, where k is the partial volume averaging scaling factor as explained in greater detail below. A venous region either within the sagittal or tranverse sinuses is located, and $C_v(t)$ is generated where $C_v(t) = C_a(t) * h(t)$ and h(t) is the transit time spectrum of the brain, as explained herein. $C_a(t)$ and $C_v(t)$ are deconvolved to find $\frac{h(t)}{k}$. And a trailing slope of $C_a(t)$ is

